



WHL · NEWSLETTER

News from the World Hypertension League (WHL).
A division of the International Society of Hypertension, and in official relations with the
World Health Organization.

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WHL Discussion Forum

Minimum standards for assessing blood pressure in surveys

Report of the Canadian Hypertension Society



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Surveillance of blood pressure is critical to population health and is a very important quality control parameter in the care of patients. Sub-optimal blood pressure is estimated to be the leading risk for death and the third leading cause of disability adjusted life years lost in the world [1]. Increasing population levels of blood pressure are a concern to almost all nations. Politicians and policy makers need to be made aware of population blood pressure data in order to create policies and regulations aimed at lowering population blood pressure and

to monitor the effects of policy and regulatory change. Similarly, policy makers for clinical care need to know the rates of undiagnosed hypertension, treatment and rates of control in order to develop programs to improve the management of hypertension and monitor the effectiveness of interventions.

In Canada, a panel of 19 hypertension experts, blood pressure measurement experts and epidemiologists, developed minimum standards for hypertension surveys. This was in preparation for 3 major surveys that proposed to assess blood pressure. The report did not address the need to assess other health (esp. cardiovascular) risks or the need to select a sample that is representative

continued on page 2

Report from Member Leagues

Physicians Knowledge and Attitudes about Hypertension in Middle Eastern Countries

The results of this multinational survey were released during the regional WHL meeting in Cairo on April 6, 2005. No information was available about physician practice of hypertension in Middle Eastern countries. Cultural, socio-economic and standards of medical education influence physician's management of hypertensive patients. Physicians (N=1882) from five the Middle Eastern countries Egypt, Iran, Pakistan, Lebanon and Tunisia were asked to fill in a questionnaire. The percentage of physicians with specialty (master degree) varied from 40.7% in Egypt to 0.5% in Tunisia. Between 3 to 8% of surveyed physicians had never checked their own blood pressure, though the majority (> 90%) agreed that hypertension is a major health problem. Asked, whether measurement of blood pressure needs special training, 41.7% of the Pakistani doctors disagreed in contrast to only 8.6% of Iranian doctors and 14% of Egyptian doctors.

About half of the Lebanese and Tunisian doctors believed that hypertension can be diagnosed by patients symptoms and 20 to 48% believed that hypertension is due to nervousness. Only 39 to

continued on page 3

Contents Page

Contents	Page
– WHL Discussion Forum Minimum standards blood pressure in surveys	1
– Report from Member Leagues Hypertension in Middle Eastern Countries	1
– New WHL Member Ecuadorian Hypertension Society	3
– People	4
– Calendar	4

Discussion Forum continued

of the population of interest (e.g. Canada). The report is available as a short manuscript [2] or as a full report on the web [3].

The Canadian report recommended **standardized questions** to assess awareness of the diagnosis and treatment of hypertension. *See textbox* for questions used in Canada. Small changes in wording can have noticeable effects on answers so the questions should be kept constant over time. It was recommended to develop a question on lifestyle treatment for hypertension. All questions should be asked of all respondents, as approximately 5% of treated hypertensive adults do not believe they have hypertension because they are ‘treated and controlled’. In Canada, most surveys only ask treatment questions in respondents who answer positively to being diagnosed with hypertension resulting in an underestimation of hypertension prevalence, treatment and control rates.

Standardized training of survey personnel, measurement technique and patient preparation for assessing blood pressure was recommended [3]. The device used for measurement of blood pressure was extensively discussed. Traditionally, this has been done by auscultation using a mercury sphygmomanometer or a calibrated aneroid manometer. With very strict quality control and extensive training this represents the **current standard** [4]. Unfortunately, mercury manometers are being banned in some countries and the expert panel did not believe that aneroid sphygmomanometers should be used because they may lose calibration during the survey. The panel recommended that automated electronic oscillometric devices be used that

- 1) had passed international standards for accuracy,
- 2) were used in the absence of survey personnel,
- 3) would measure and record at least 3 readings.

This use of automated devices can reduce observer training, observer bias and result in less observer related hypertension (white coat hypertension and white coat effect). Therefore it was believed automated devices would improve the reliability and reproducibility of blood pressure readings in surveys. Blood pressure readings at two visits were recommended.

It was recommended that data be analyzed to determine the prevalence of hypertension, awareness of hypertension, drug and lifestyle treatment rates, and the treatment and control rate. Analysis should include population, age and sex standardization. The data should be stored centrally and be available for independent analysis allowing analyses of geographical variation and assessment of changes over time through comparison with other surveys.

It is important to note that these criteria may not be applicable to all developing countries where the cost of equipment may be a factor. Nevertheless, the recommendations still need to be considered as the cost of equipment is likely to be a small component of a blood pressure survey. It was hoped the report would provide a stimulus for an international consensus on assessing blood pressure in surveys. Internationally standardized questions and measurement techniques would benefit all countries.

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Comments on this topic are welcome.
 For references, please see page 3.

Questions in the Canadian Community Health Survey on diagnosis and treatment of hypertension:

“Remember, we’re interested in conditions diagnosed by a health care professional”.

“Do you have high blood pressure?”

1 Yes 2 No Don’t know

“Now I’d like to ask you a few questions about your use of prescription medications. In the past month, that is, from (date one month) to yesterday, did you take medicine for blood pressure?”

1 Yes 2 No Don’t know

Physicians Knowledge and Attitudes continued

71% of doctors ask for laboratory evaluation of hypertensive patient, 60 to 88% check blood sugar and 71 to 97% check cholesterol. Non-pharmacologic treatment of hypertension was not known by 78% of Pakistani doctors against 17.5% of Egyptian doctors and 54.8% of Tunisian doctors. Weight control was thought to be the most effective method by the majority of doctors in Tunisia (82%), Pakistan (81.9%), Lebanon (81.3%) and Egypt (69%), while approximately two thirds of doctors believed in salt restriction. Half of the Iranian doctors believed in herbal medicine for treatment of hypertension while only 17% of Egyptian and 9% of Pakistani and 17.3% of Tunisian and 9.6% of Lebanese doctors believed in herbal medicine. Drugs of first choice for treatment of hypertension were ACE-I by Egyptian and Lebanese doctors, beta-blockers by Pakistani and Iranian doctors and thiazides by Tunisian doctors. About half of the doctors added another drug if blood pressure is not controlled, one third increased the dose and less than 20% changed the drug.

The main source of information about antihypertensive drugs varied, 90.1% from drug advertisement in Tunisian doctors, 76.5% from scientific meetings in Lebanese doctors.

Conclusions:

1. In Middle Eastern countries, there are differences among physicians regarding their knowledge and attitudes about hypertension.
2. There is misinformation and a number of false beliefs about hypertension among physicians.
3. The survey clarifies points of strength and weakness in physician knowledge.
4. The information will help in planning future physician education programs which are badly needed in Middle Eastern countries to improve hypertension control in this part of the world.



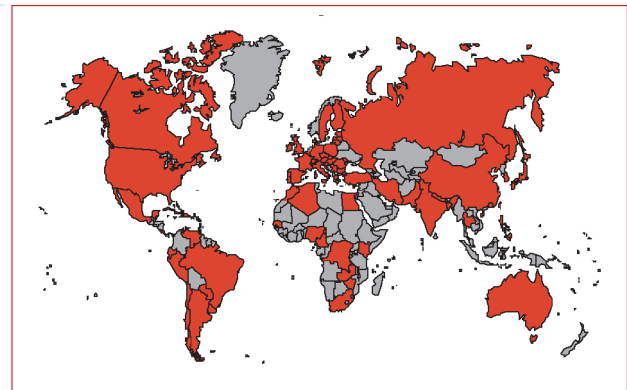
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New WHL Member

The WHL is pleased to welcome the **Ecuadorian Hypertension Society** as a new member:

Dr. Carmita Perugachi
 President
 Ave. 6 de Diciembre 2130 y Colon
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 Quito, Ecuador

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The WHL members worldwide (marked in red) in 2005

The WHL will do everything to make their membership a fruitful experience. The total number of WHL members has thus increased to 81. ■

Discussion Forum continued

References:

1. Ezzati M, et al.: Comparative Risk Assessment Collaborating Group. *Lancet*, 2002; **360**:1347–1360.
2. Campbell NRC, et al.: Hypertension surveillance in Canada. *Can J Public Health*, 2005; **96**: 217–220.
3. Report of an Expert Committee of the Canadian Hypertension Society, the Canadian Coalition for High Blood Pressure Prevention and Control and the Heart and Stroke Foundation of Canada (2004). (www.hypertension.ca/Documentation/National_BP_survey_2004.pdf).
4. Ostchega Y, et al.: National Health and Nutrition Examination Survey 1999–2000. *Journal of Clinical Epidemiology*, 2003; **56**: 768–774. ■

People

Dr. João Saavedra has been elected President of the **Portuguese Society of Hypertension** for the period 2005-2007. Secretary General is Dr. Paula Alcântara, Campo Grande, 28-13°, 1700-093 Lisbon, Portugal.

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 Fax: (+351-21) 793 1095
 E-mail: secretariado@mail.spc.pt

On June 1, 2005, Prof. N. Lefkos was elected President of the **Hellenic Society of Hypertension**. Prof. A. Lasaridis is General Secretary, 111, Vas. Sofias Ave, 11527 Athens, Greece.

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Impressum

The objectives of the WHL are to promote the detection, control and prevention of arterial hypertension in populations. The World Hypertension League (WHL) is a federation of leagues, societies and other national bodies devoted to this goal. Individual membership is not possible. The WHL is a division of the International Society of Hypertension (ISH), and is in official relations with the World Health Organization (WHO).

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 Lawrie Beilin (Perth), Michael Alderman (New York)

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 M. Mohsen Ibrahim (Cairo), Developing Countries
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Calendar

Two Day Meeting Artery 5 “Large Artery Structure and Function “

September 30–October 1, 2005
 Paris, France

Information: Hampton Medical Conferences Ltd.
 113-119 High Street
 Hampton Hill, Middlesex, TW12 1NJ, UK
 Fax: (+44-20) 8979 6700
 Website: <http://artery.ukevents.org>

1st International Symposium of the Center for Cardiovascular Research

October 21–22, 2005
 Berlin, Germany

Information: Prof. Dr. Thomas Unger
 Institute of Pharmacology & Toxicology
 Charité University Medicine
 Hessische Str. 3-4, 10115 Berlin, Germany
 Fax: (+49-30) 450 525 901
 E-mail: thomas.unger@charite.de

Scientific Session of the American Heart Association (AHA)

November 13–16, 2005
 Dallas, TX, USA

Information: Secretariat AHA
 7272 Greenville Avenue
 Dallas, TX 75231, USA
 Fax: (+1-214) 706 5262
 E-mail: session@heart.org

1st International Conference on Hypertension, Lipids, Diabetes and Stroke Prevention

March 30–April 1, 2006
 Paris, France

Information: Congress Secretariat,
 17 Rue du Cendrier, PO Box 1726
 CH-1211 Geneva, Switzerland
 Fax: (+41-22) 732 2850
 E-mail: strokeprevention@kenes.com

Joint World Congress on Stroke

October 26–29, 2006

Cape Town, South Africa
Information: Kenes International
 17 Rue du Cendrier, PO Box 1726
 CH-1211 Geneva, Switzerland
 Fax: (+41-22) 732 2850
 E-mail: stroke2006@kenes.com